## FOUNDATIONS OF FLIGHT

Brought to you by AXIS Flight School Instructor Niklas Daniel at Skydive Arizona in Eloy. Photos by Steve Curtis.







Note: To provide the reader with a reference point for the jumper's movement, he is pictured flying with a weighted ball (a skyball) that has a consistent fall rate and no lateral movement. A jumper should jump with a skyball only if he has the skill to retrieve it prior to deployment and has the permission of the aircraft pilot and drop zone management. Federal Aviation Regulations Part 91.15 states, "No pilot in command of a civil aircraft may allow any object to be dropped from that aircraft in flight that creates a hazard to persons or property. However, this section does not prohibit the dropping of any object if reasonable precautions are taken to avoid injury or damage to persons or property."

## **Purpose**

- ▶ To achieve greater mobility while flying head down or back-flying.
- ▶ To perfect a flying position that has a wide fall-rate range and allows the jumper to cover great distances.

## **Execution**

To carve, you'll essentially combine forward movement with a turn. Begin in the head-down shelf position (see "Foundations of Flight," March Parachutist). Look in the direction in which you would like to travel, and initiate a little bit of forward movement by releasing some of HEAD-DOWN IN-FACING CARVING





the air pressure on your arms by bringing your arms a little closer to your body and extending your legs slightly.

As you begin to move, stay squared off with (continue to face toward) your target. To do this, you'll move the shoulder that is farthest away from your target forward. The greater distance you move your shoulder forward, the tighter the turn will be, and the closer your orbit will be to your target. Resist the urge to pull your shoulder toward your ear; instead, pivot around the axis of your spine.

Control your level using the alignment of your head and hips on the vertical axis (e.g., the farther your head slides out from underneath your hips, the slower you will fall).

## **Helpful Hints**

Do not attempt to turn using your legs. Rather, allow your legs to be the source of forward movement, while your torso takes charge of direction. Do not arch your chest or move your chin forward unless you want to decrease your fall rate.



To view the instructional video, use the QR code to the left or visit the Foundations of Flight page at parachutistonline.com.